



## Submersible Motors



Pedrollo PD submersible motors are of the oil filled rewindable type designed to give exceptional reliability and efficiency in all borehole pumping applications. They are constructed principally from stainless steel AISI 316 making them robust and long lasting in harsh operating conditions. Features include;

- Oil filled type motor with FDA approved colourless oil
- Largely stainless steel AISI 316 construction with duplex shaft
- Oil lubricated thrust and radial bearings
- Reinforced netted NBR diaphragm for internal motor pressure compensation
- Standard NEMA flanges for use with both 4" and 6" pumps
- Sacrificial anode available on request for 4PD for extremely aggressive water and stray currents

Protection: IP68 Insulation Class: F Voltage: 1x230V/240V,50Hz / 3x380V/415V,50Hz

## **OPERATING PARAMETERS**

Max Voltage Variation:  $\pm 10\%$ Max Starts/Hr: 20 - 4'' and 30 - 6''

Max Water Temperature: 4PD (40°), 6PD (35°)

Min Water Pass Flow Rate: 8 cm/s Max Immersion Depth: 200m

**Installation:** Vertical/horizontal with a tilt angle  $>5^{\circ}$ 

MOTOR DATA SINGLE PHASE

Motor		In	Istart	PF	Capacitor	Tail Cable		н	Weight
kW	HP	(A)	(A)	CosØ	μF	mm²	m	(mm)	(Kg)
0.37	0.5	3.6	12	0.86	20	1.5	2	311	7
0.55	0.75	4.7	16	0.89	25			331	8
0.75	1	5.9	19	0.91	35			356	9
1.1	1.5	8.3	27	0.93	40			396	11
1.5	2	10.7	35	0.93	60			437	13
2.2	3	15.2	47	0.94	75			492	1.5

## **THREE PHASE**

Motor		In	Istart	PF	Tail Cable		Н	Weight
kW	HP	(A)	(A)	(CosØ)	mm²	m	(mm)	(Kg)
0.37	0.5	1.8	6	0.52			311	7
0.55	0.75	2.0	0	0.63			331	8
0.75	1	2.5	10	0.71	1.5	2	356	9
1.1	1.5	3.4	16	0.79	] '''	-	371	/
1.5	2	4.8	18	0.66			396	11
2.2	3	6.1	40	0.73			437	13
3.0	4.0	7.1	40	0.79			450	14
4.0	5.5	9.2	50	0.77	2	3.6	505	16
5.5	7.5	12.3	66	0.82	]		590	20
7.5	10	16.4	89	0.76	1		800	30
4.0	5.5	9	47	0.86			595	33
5.5	7.5	13	66	0.84	]	3	625	37
7.5	10	17	80	0.83	4		660	38
9.2	12.5	22	98	0.77	] "		700	43
11	15	24	124	0.82	]		765	52
15	20	32	158	0.86			820	58
18.5	25	39	230	0.84		4	883	63
22	30	47	256		7 8		953	79
30	40	64	349	0.83	1 °		1098	92
37	50	78	400	1			1233	93

## MATERIAL SPECIFICATION

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Component	Material				
Motor shell	316 stainless steel				
Sand guard	NBR				
Cable connector	LDPE+TPO+AISI304				
Upper end bracket cover	4"-304 stainless steel				
Upper end bracket	Cast Iron with cataphoresis treatment				
Mechanical Seal	Ceramic/Graphite				
Shaft	Duplex				
Lower end bracket	4"-Stainless steel, 6"-Cast Iron				
Winding	Copper				
Lower end bracket cover	AISI 304 stainless steel				
Diaphragm	NBR				